Assessment & Treatment of Mentally Ill AODA Clients. 3. Post Traumatic Stress Disorder

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Posttraumatic Stress Disorder

- Follows a trauma event
- Reexperiencing of trauma (one symptom)
- Persistent avoidance of associated stimuli (three symptoms)
- Persistent increased arousal symptoms (two symptoms)
- One month or more duration

DSM-IV Criteria for PTSD

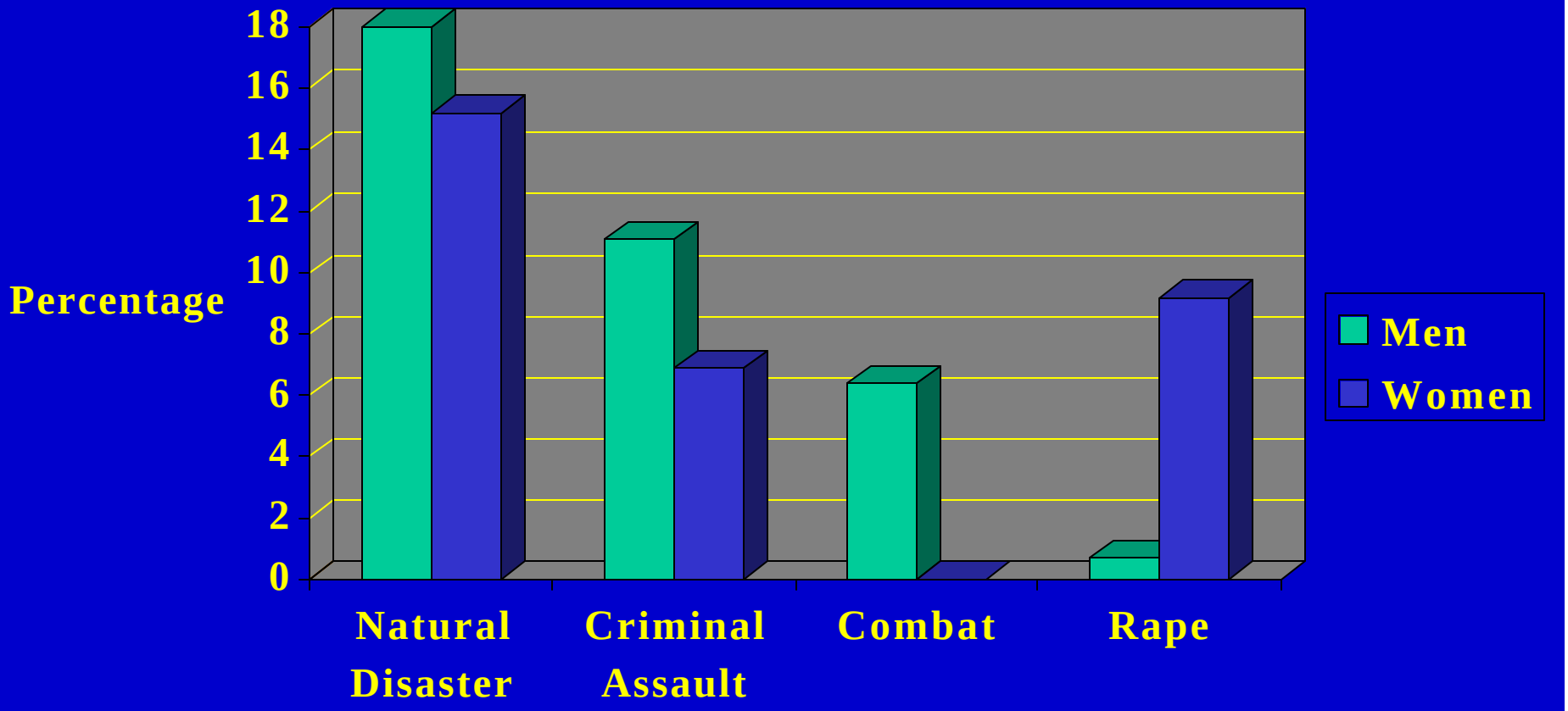
- Exposure to traumatic event with
  - Actual or threatened death or serious injury

  AND

  - Response involving intense fear, helplessness, or horror

(American Psychiatric Association, 1994)

Risks of Specific Traumas in the U.S. Population



Approximately 30% of people exposed to trauma developed PTSD.

Kessler et al., 1995

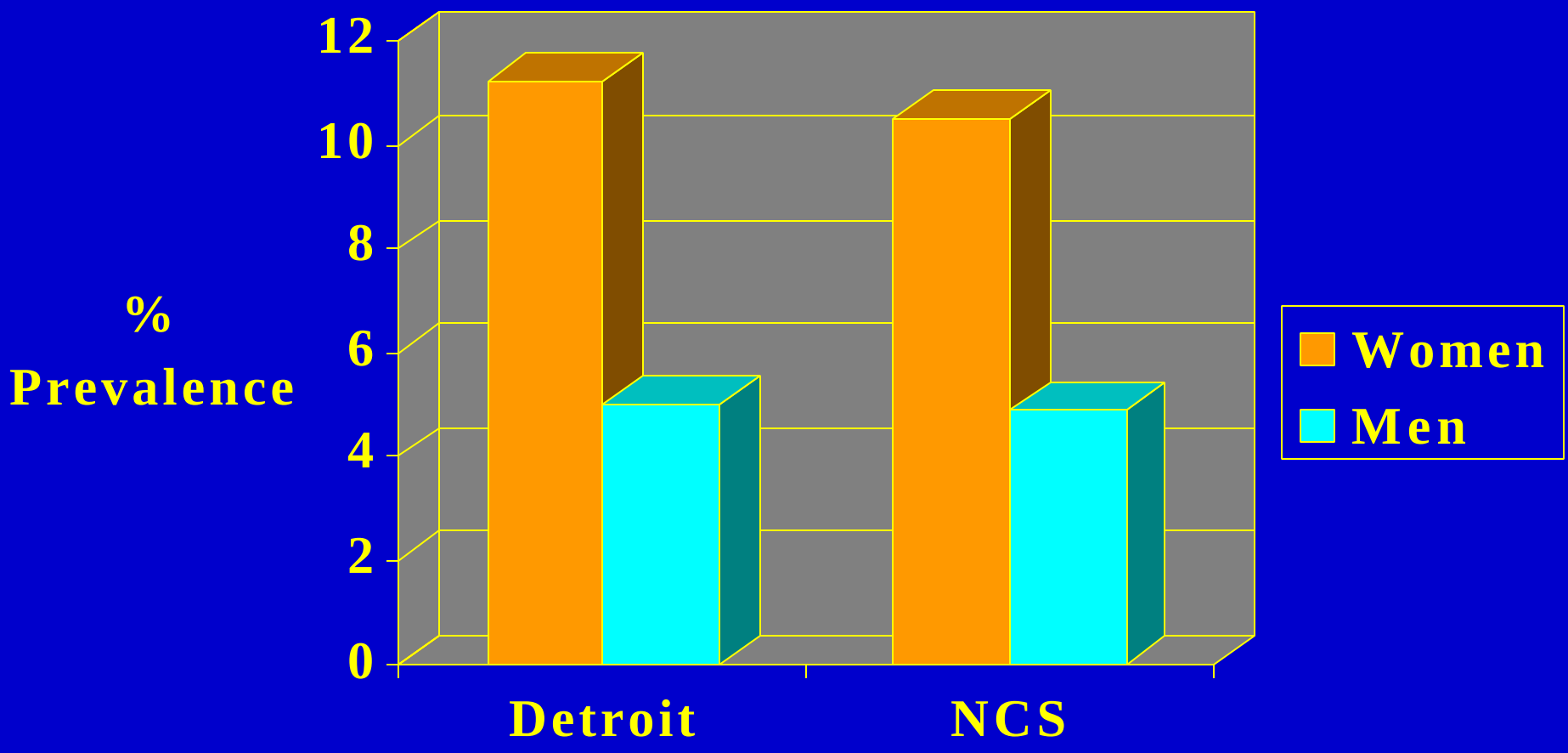
DSM-IV Criteria for PTSD (cont'd)

- Re-experiencing the traumatic event
- Persistent avoidance of stimuli associated with event
- Numbing of general responsiveness
- Symptoms of increased arousal

- At least 1 month's duration (otherwise can diagnose Acute Stress Disorder)
- Significant distress or impairment in social, occupational, or other functioning

American Psychiatric Association, 1994

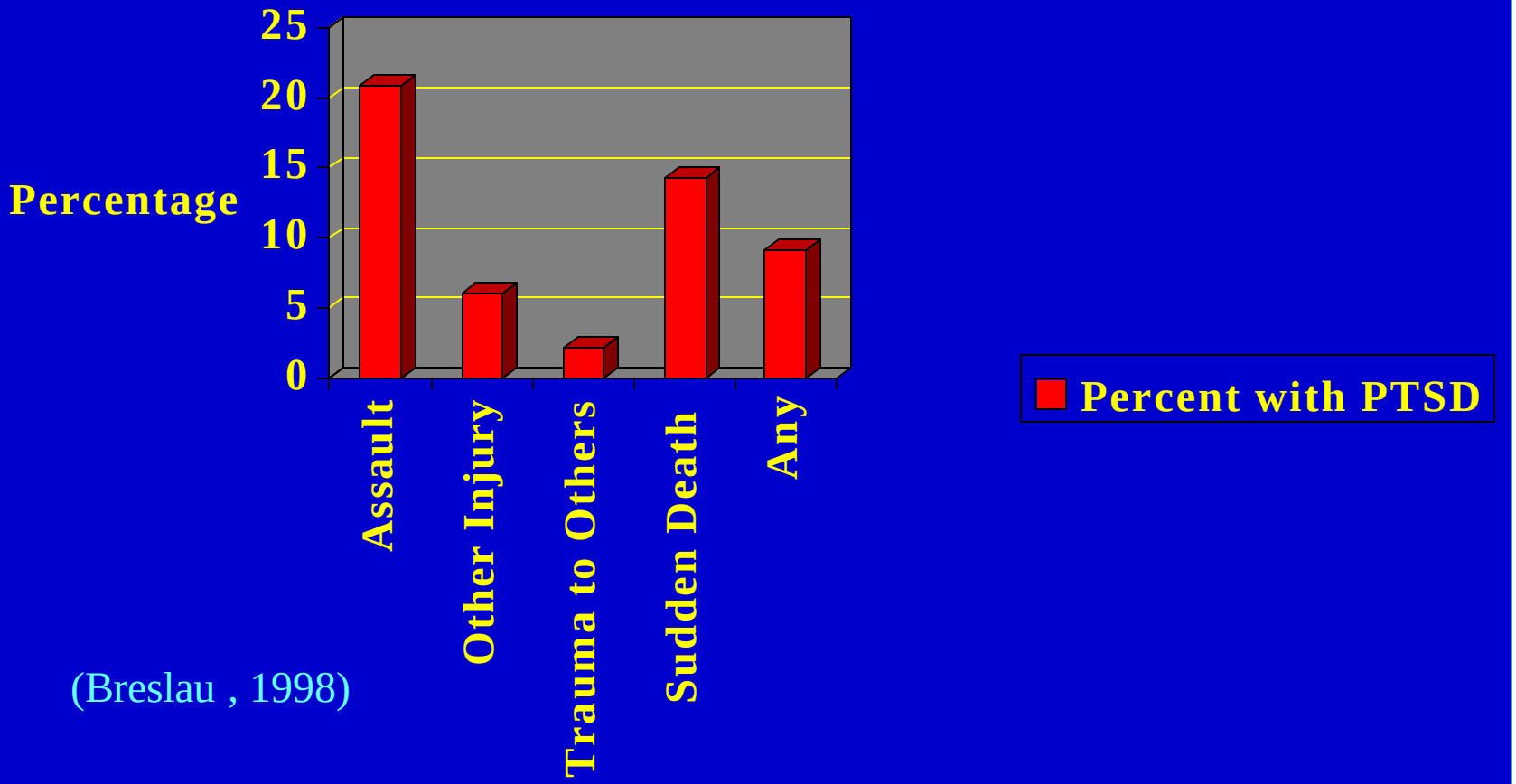
Lifetime Prevalence of PTSD



Breslau et al. Arch Gen Psychiatry, 1991;48:216-222.

Kessler et al. Arch Gen Psychiatry, 1995;52:1048-1060.

Risks of PTSD Following Specific Traumas in the U.S.



(Breslau , 1998)

Traumatic Assault Type and PTSD Risk

Trauma Type	PTSD risk (%)
Raped	49.0
Badly Beaten	21.9
Other Sexual Assault	23.7
Serious Accident or Injury	16.8
Shot or Stabbed	15.4
Sudden Unexpected Death [Close Friend/ Relative]	14.3

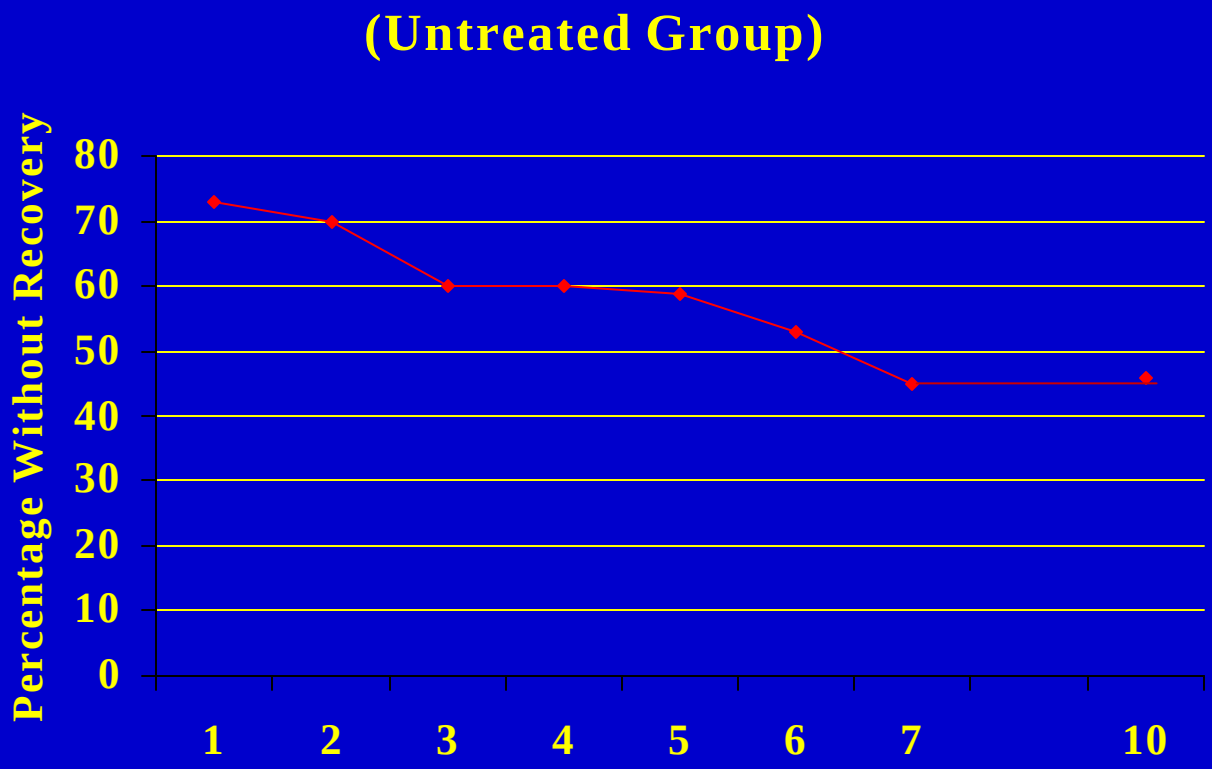
Breslau et al.., 1998

PTSD Epidemiology: Gender Effects

- Prevalence of trauma exposure:
  - Males 61%
  - Females 51%
- Rates of PTSD after trauma
  - Women 20.4%
  - Men 8.2%
- Lifetime PTSD prealence
  - Women 10.4%
  - Men 5.0%

Kessler et al Arch Gen Psychiatry 1995 52:1048

Persistence of PTSD



(Kessler et al., 1995)

Rates of PTSD among Substance Abusers

VA combat vets	30-55%
Clinical tx programs	30-59%
Epidemiologic studies	20-30%

Cocaine/opiate users at highest risk of PTSD, controlling for gender & ASPD

Cottler et al., 1993, Najavits et al 1996, Jacobson et al 2001

Rates of Crime-Related PTSD among Substance Abusers

Sexual or physical assault	95%
Crime-related PTSD	50%

Males: younger when assaulted

family member > other

Dansky et al Am J Drug Alc Abuse 2001

Benzodiazepine Use in Veterans with PTSD

- Lower rates of Rx for benzos for PTSD pts with substance use diosrders [26 vs. 45%]
- Lower OP MH care use among BZ users
- No excess of negative effects on outcome

Kosten et al J Nerv Ment Dis 2000

Fear Conditioning & Altered Information & Emotional Processing in PTSD

- Increased physiologic reactivity to trauma-related stimuli
- Increased attention to trauma-related words
- Fragmentary narratives

- Reduced hippocampal volume?
- Underactivation of speech production [Broca's] area during symptom provocation

Altered Stress Response & Neurotransmitter Regulation in PTSD

- Reduced cortisol secretion
- Increased sensitivity of stress HPAxis to feedback inhibition
- Increased nor-epi and epinephrine
  -may enhance fear-related learning
- PTSD [combat-related] anxiety and dissociation symptoms stimulated by noradrenergic and serotonergic agents

Sleep in PTSD

Subjective

- **Trauma-related nightmares**
- **Insomnia/nonrestorative sleep**

Objective (EEG findings)

- **Increased REM density & impaired REM maintenance**
- **Increased motor activity**

Ross et al., 1994; Mellman et al., 1997

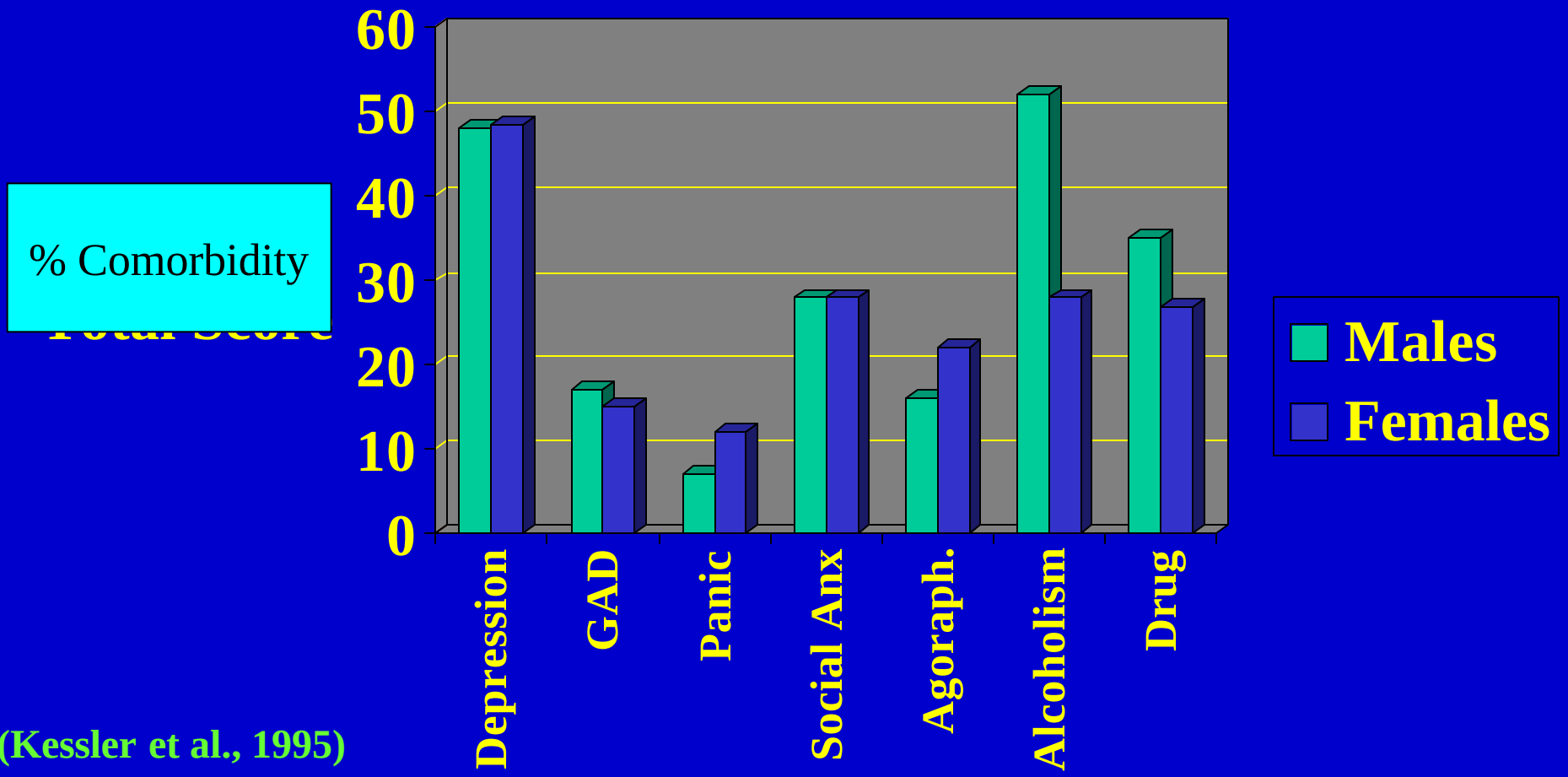
Psychiatric Co-morbidity in PTSD

Lifetime Rates (%)

	Men		Women	
	PTSD	Non-PTSD	PTSD	Non-PTSD
Depression	48	12	48	19
Mania	12	1	6	1
Panic disorder	7	2	13	4
Social phobia	28	11	28	14
GAD	17	3	15	6
Alcohol abuse/dependence	52	34	28	13
Drug abuse/dependence	34	15	27	8
Any diagnosis	88	55	79	46

(Kessler et al., 1995)

Psychiatric Comorbidity in PTSD



(Kessler et al., 1995)

Common Genetic Influences on Substance Use Disorders & PTSD

- PTSD risk in Vietnam Era Twin Study is
  - –20% PTSD-specific genetic risk
  - –15% shared [SUD-PTSD] genetic risk
  - –Common environmental factors
  - –Specific environmental factors
- Alcoholism risk in this study is
  - –56% shared [PTSD-ALC] genetic risk
- Drug Dependence in this study is
  - –34% shared [PTSD-ALC-DRUG] genetic risk

Xian et al. Drug Alc Depend 2000

Correlation of PTSD and Substance Dependence Symptoms

- 42 substance abusers with PTSD
- Perceived symptom severity of both disorders correlated temporally
- Most not referred by AODA counselors for PTSD treatment
- Lack of trust differentiated PTSD tx compliers from non-compliers

Brown, et al, J Substance Abuse Treatment 1998; 15:445-448

Temporal Association of PTSD and Substance Use Disorders

	Odds Ratio
PTSD: increase risk of SUD	2.6-7.6*
Trauma: increase risk of SUD	0.8-1.1
PTSD: sedative ab/dependence	5.3-32*
Drug ab/dep: risk trauma	0.7-1.3
Drug ab/dep: risk PTSD if trauma	0.6-1.4

Conclusion: PTSD leads to SUD, not vice versa

Chilcoat & Bresllau Arch Gen Psych 1998

Longitudinall Association of PTSD and Substance Use Disorders [SUDs]

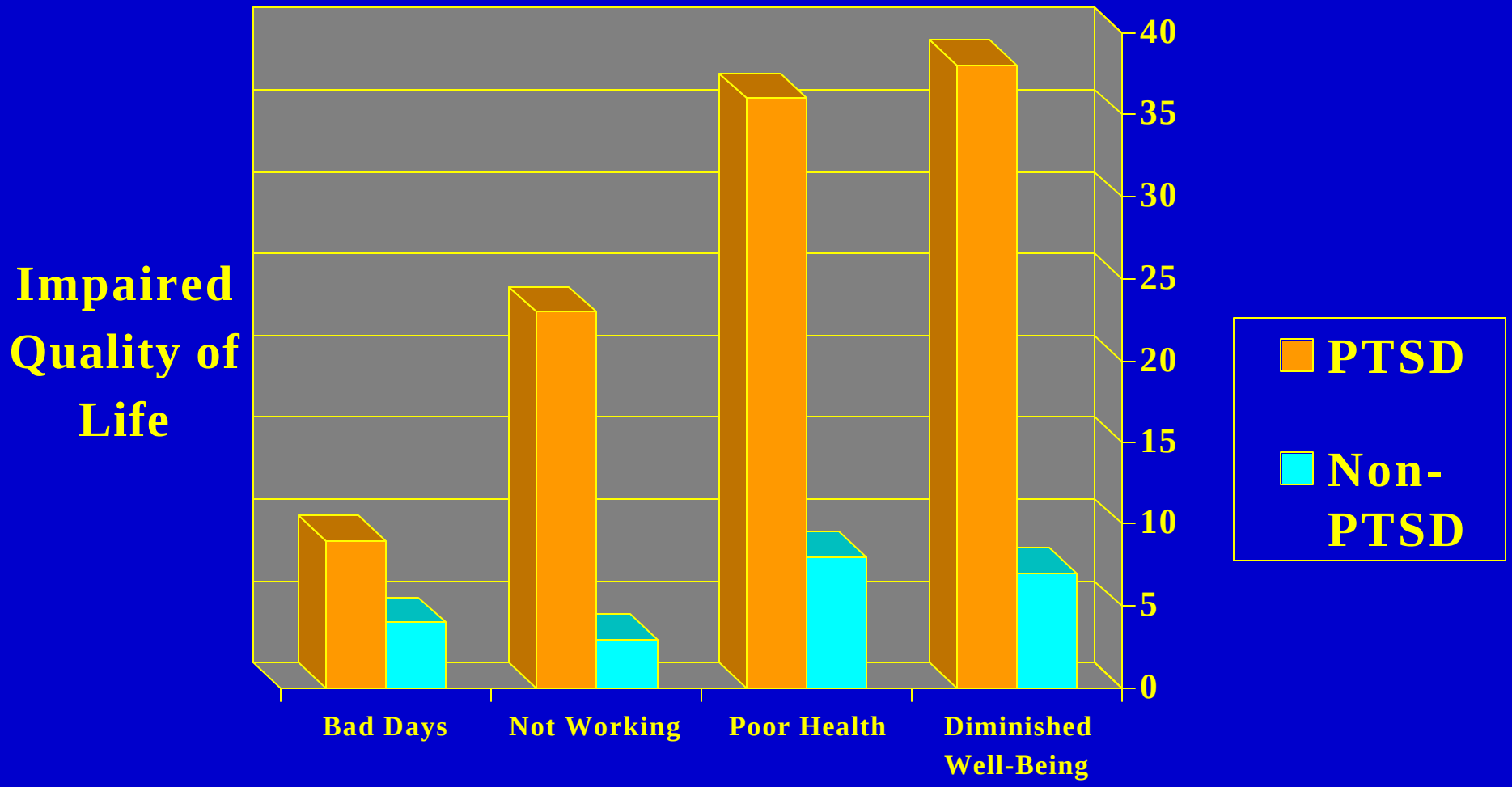
Initially PTSD precedes SUDs

Once dependence develops, withdrawal may worsen PTSD symptoms

Biologically, CRH and NE parts of stress response systems are augmented

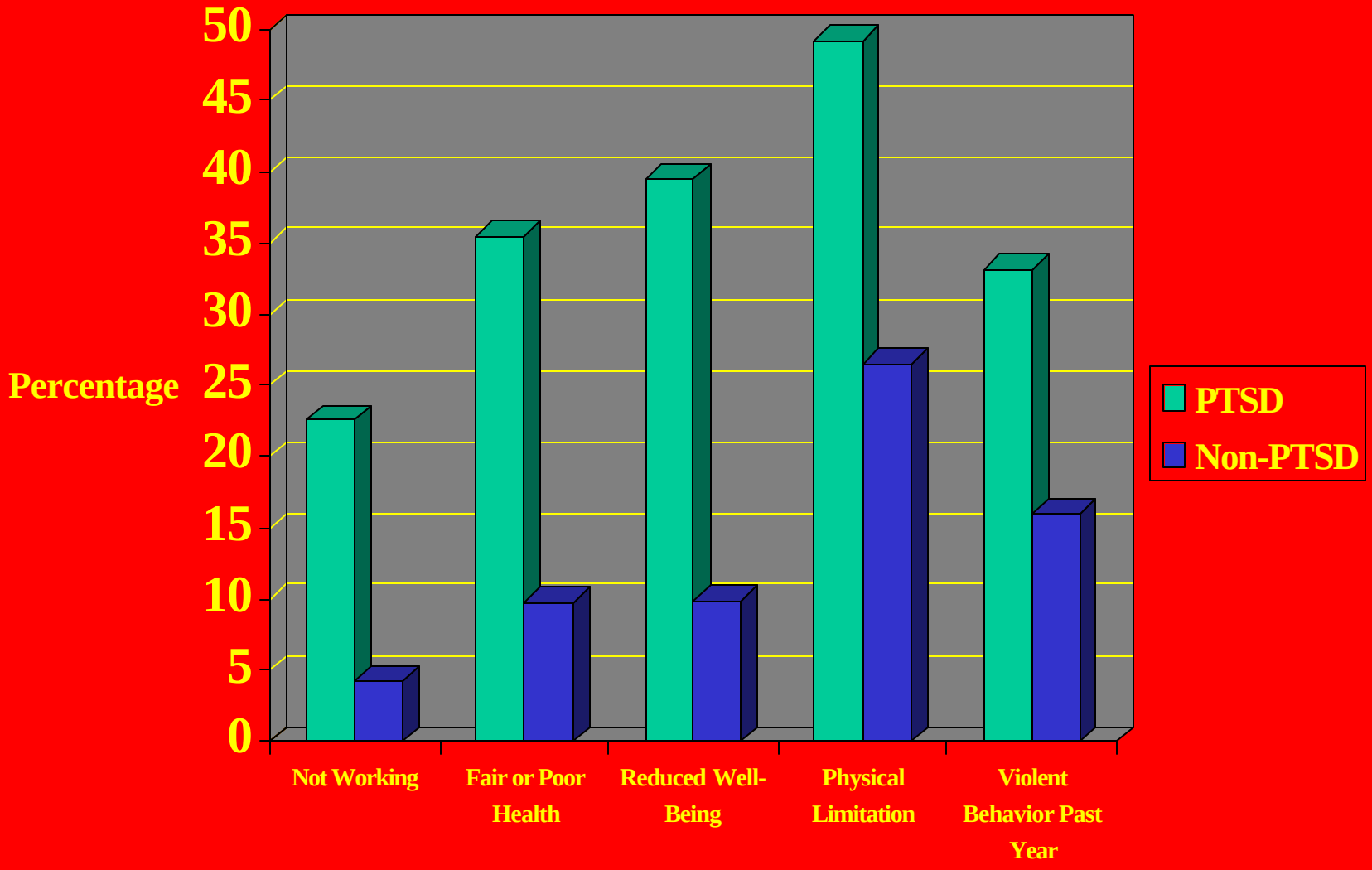
Jacobsen, Southwick, & Kosten Am J Psych 2001

Impaired Quality of Life and PTSD (Veterans)



Zatzick DF et al. Am J Psychiatry. 1997;154:1690-1695

Function and Quality of Life in Vietnam Veterans With and Without PTSD



Zatzick et al., 1997

Different Patterns of Outpatient Health Service Utilization*

	PTSD (n=49)	Controls (n=147)
General Medical Visits to MD	71%	43%
Visited Mental Health Professional	20%	4%
Use of Antidepressants (PTSD)	33%	0%
Use of Anxiolytics (PTSD)	44%	2%

* Past 6 months.

Amaya-Jackson et al. (ECA Study), 1998

Psychosocial Treatments for PTSD

- Group InterpersonalTherapy*
- Hypnosis therapy
- Psychodynamic Psychotherapy
- Cognitive-Behavioral Treatments
  - -Exposure Therapy **
  - -Anxiety cognitive-behavioral mgmt techniques**
  - -General relaxation training techniques
  - -Eye movement desensitization & reprocessing (EMDR)*

Exposure Therapy: Principles

- Develop a narrative, process trauma
- Habituation:memory stops causing anxiety
- Thinking about trauma not dangerous
- Identify and neutralize environmental cues

Eye Movement Desensitization and Reprocessing (EMDR)

- Exposure w/ saccadic eye movements
- Patient focus: disturbing memory
- Movements track finger movements or other moving stimuli
- Positive cognitions suggested by therapist
- Dismantling studies: hypnotizability & therapist skill key elements, not EM's

Effect of PTSD on Substance Use Disorder Treatment

- PTSD consistently associated with poorer outcomes for SUD
- PTSD represents barrier to SUD tx

- ❑Need routine screening for PTSD
- ❑Need concurrent Tx for PTSD & SUD
- ❑Higher intensity of Tx & family Tx needed

Ouimette et al, , Addict Behav 1998

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Ouimette et al, , Addict Behav 1998

Substance Dependence PTSD Therapy

- 5 month, 2x/week manualized individual tx
- Relapse prevention and coping skills
- Psychoeducation re: PTSD & SUD
- Stress Inoculation Training & In Vivo Exposure
- Designed for M & F

Triffleman et al, , J Substance Abuse Treatment 1999; 17:3-14

CBT for Substance Dependent Women with PTSD

- Education: both disorders, sx interplay
- Promote self-control: mgmt of neg. affects
- Teach functional behavior
- Relapse prevention training

Najavits et al, J Substance Abuse Treatment 1996; 13:13-22

CBT for Substance Dependent Women with PTSD: Outcomes

- 17 F completed a manual-guided 24-session course of CBT
- Good session attendance & satisfaction
- Significant improvements in
  - –Substance use and substance-related thougts
  - –PTSD & depression symptoms
  - –Suicide thoughts and risk
  - –Social adjustment and global functioning
  - –Knowledge related to treatment
- No control group

Najavits et al, J Traum Stress 1998; 11:437-456

Anger Management in Substance Abusers with PTSD

- High levels of aggressive behavior here
- 12-week CBT group therapy
- Anger Management:
  - –self-monitoring with anger meter
  - –cues, high risk situation review
  - –anger control plans, time out use
  - –conflict resolution
  - –monitoring and challenging cognitions

Reilly et al., J Psychoactive Drugs 1994

Effective Treatment Strategies for Substance Abusers with PTSD

- SUD pts with PTSD have more psych problems, less effective coping styles & more positive beliefs about substance use than SUD pts without PTSD
- This is lessened by
  - More counseling for family problems
  - More 12-step involvement

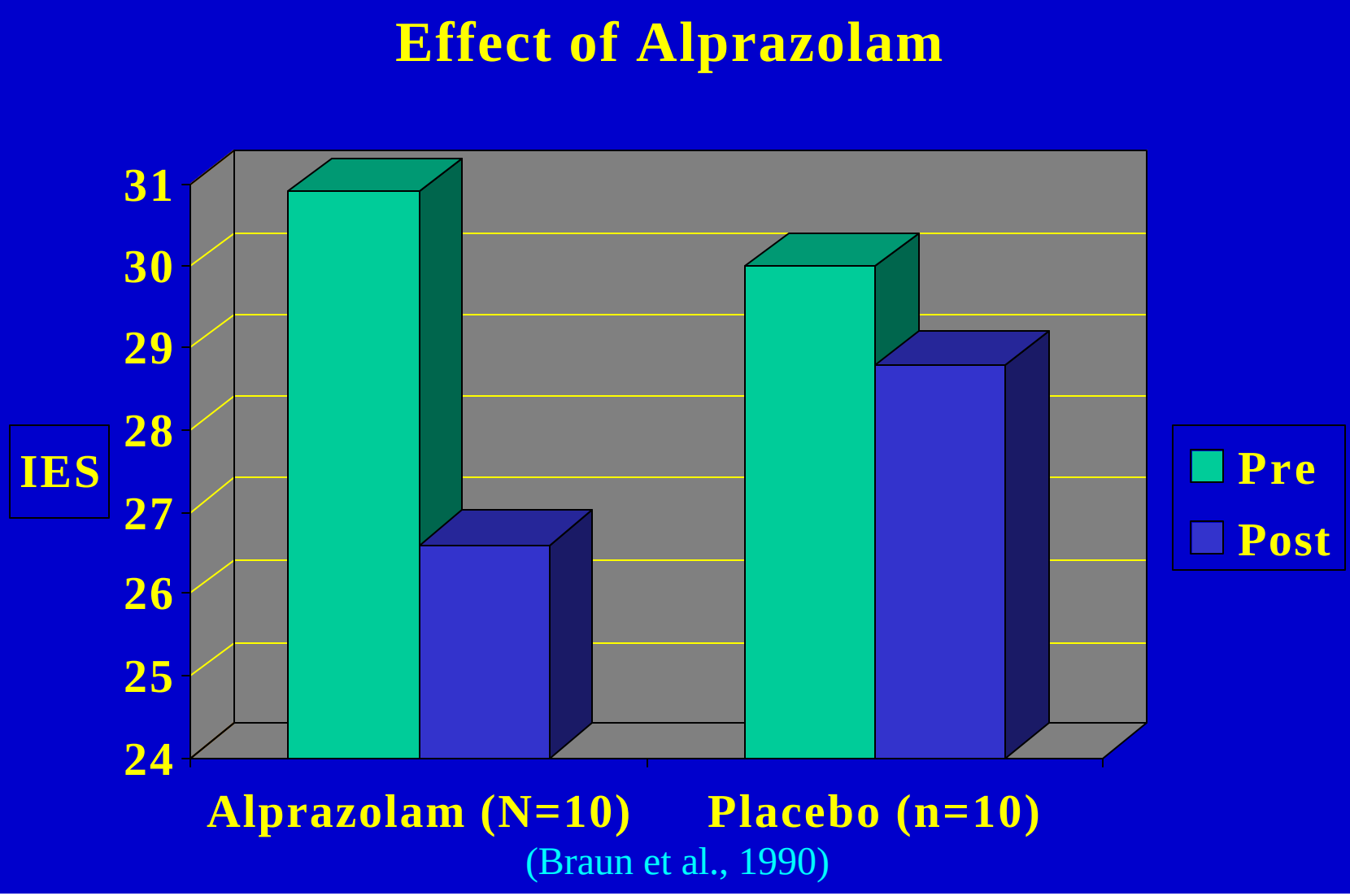
Ouimette et al., J Subst Abuse Treat 1998

Effective Screening for PTSD among Substance Abusers

- PTSD Symptom Self-Report Scale
  - Measures frequency & severity of PTSD sxs
  - Reliable
  - Valid
- Detected 89% of PTSD cases among Substance Abusers

Coffey et al J Traumatic Stress 1998

Treatment of PTSD With Benzodiazepines



(Braun et al., 1990)

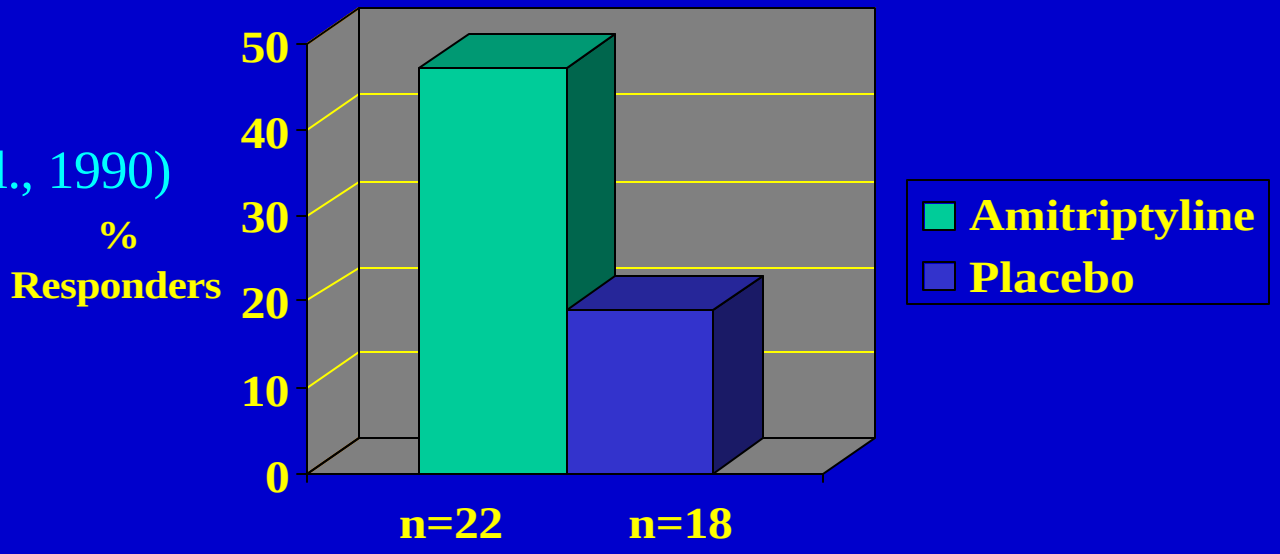
Controlled PTSD Antidepressant Trials

Study	Drug	N	Population	Results
Davidson et al, 1990	Amitryp	62	Combat	Superior to PBO
Kosten et al, 1991	Imipramine Phenelzine	61	Combat	Both superior to PBO
Katz et al, 1995	Bro	45	Mixed	Superior to PBO
Baker et al, 1995	Bro	113	Mixed	No Statistical Significance
Van der Kolk et al, 1995	Fluox	47	Mixed	Superior to PBO in civilians only
Davidson et al, 1997	Fluox	64	Civilian	Superior to PBO
Davidson et al, 1997	Sertraline	109	Civilian	Superior to PBO
Brady et al, 1998	Sertraline	187	Civilian	Superior to PBO

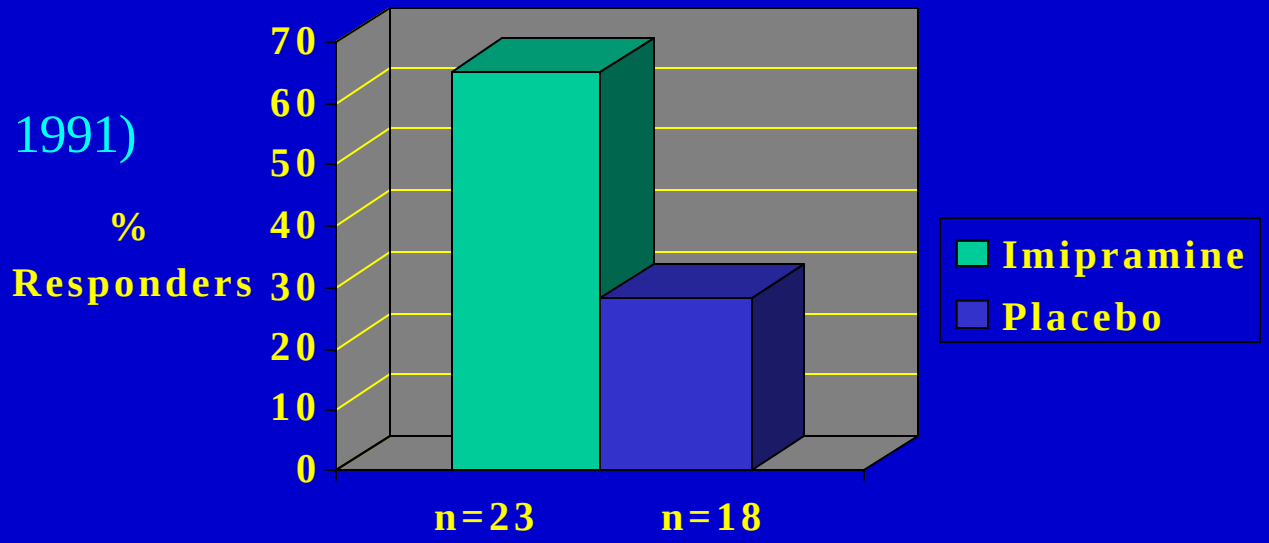
Treatment of PTSD With TCAs

Studies Comparing Amitriptyline and Imipramine to Placebo

(Davidson et al., 1990)

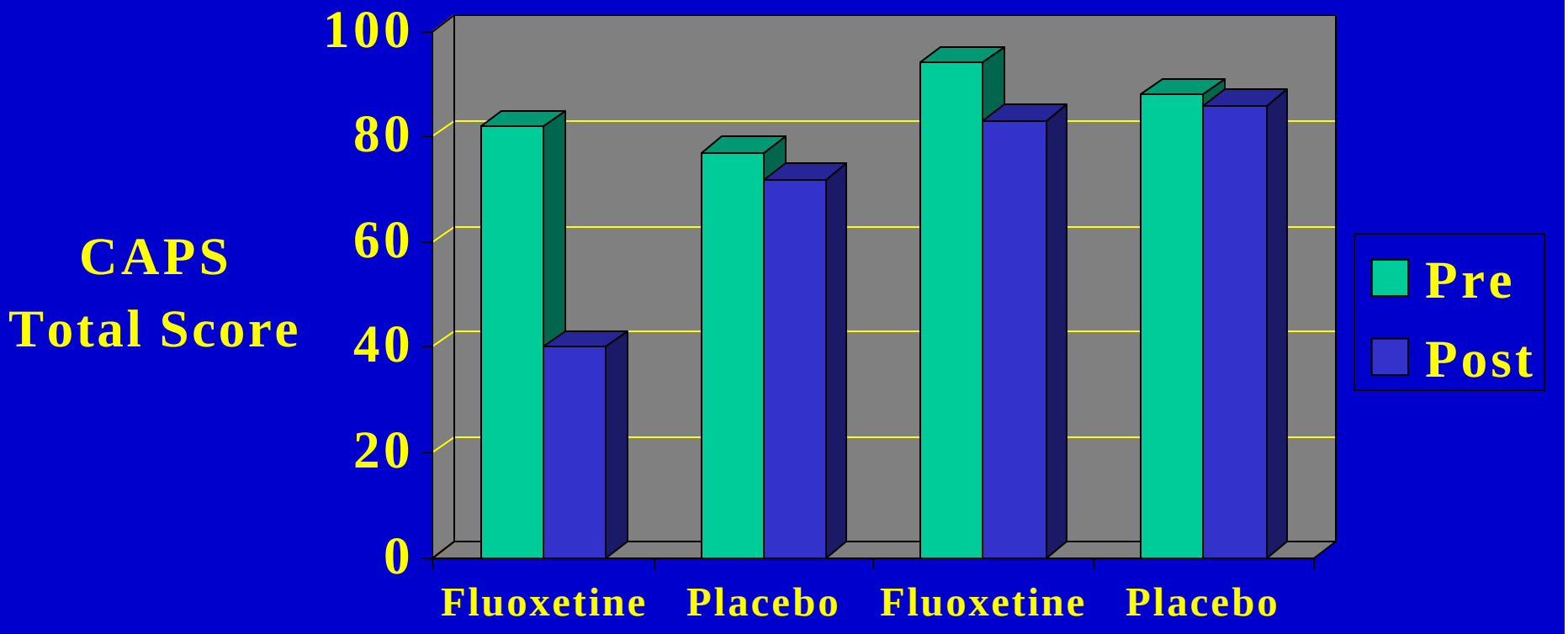


(Kosten et al., 1991)



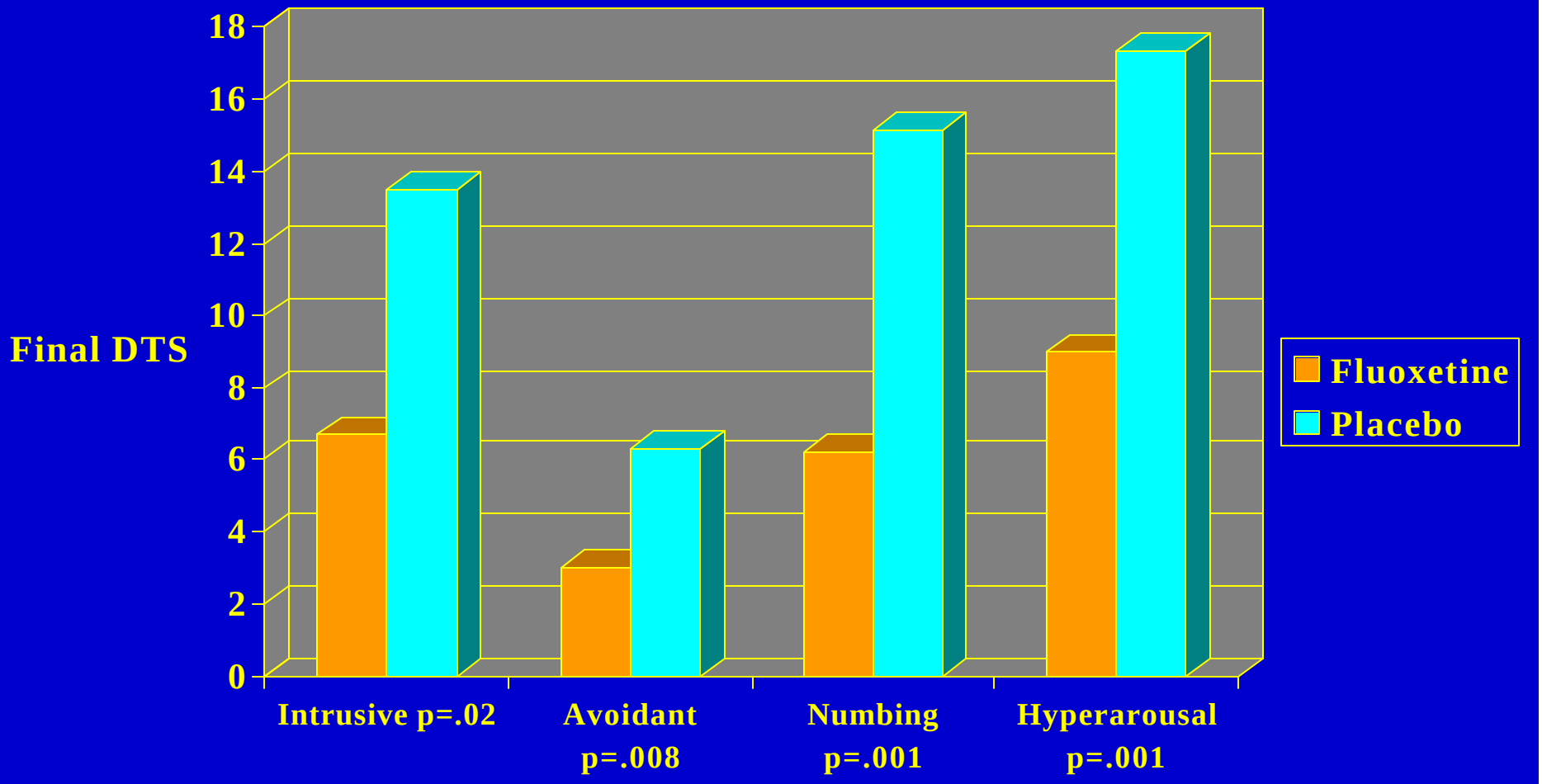
Treatment of PTSD With Fluoxetine

Effect of Population



Van der Kolk et al., 1993

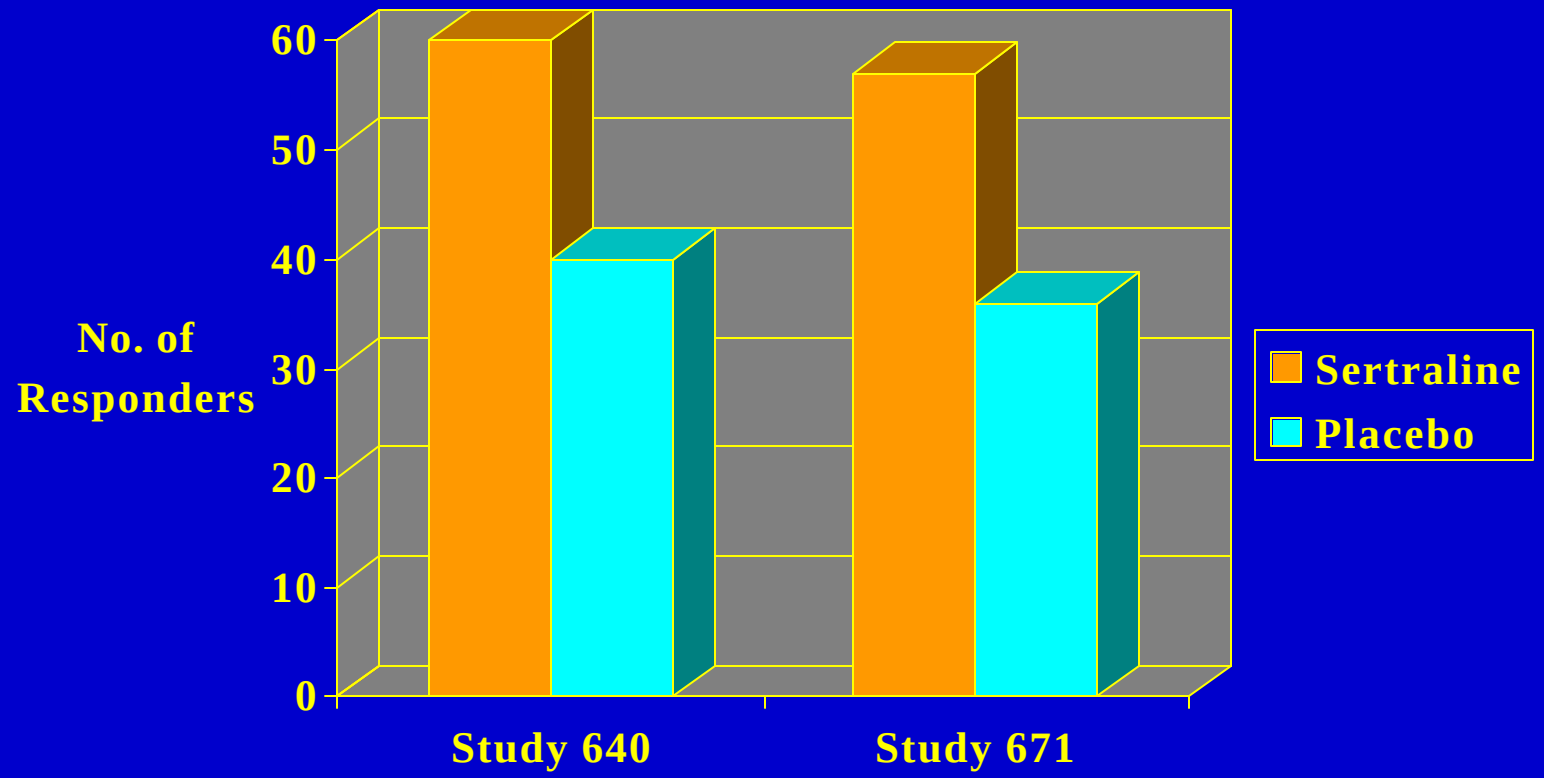
SSRI Treatment Effects on all PTSD Symptom Clusters



PTSD Responder Analysis

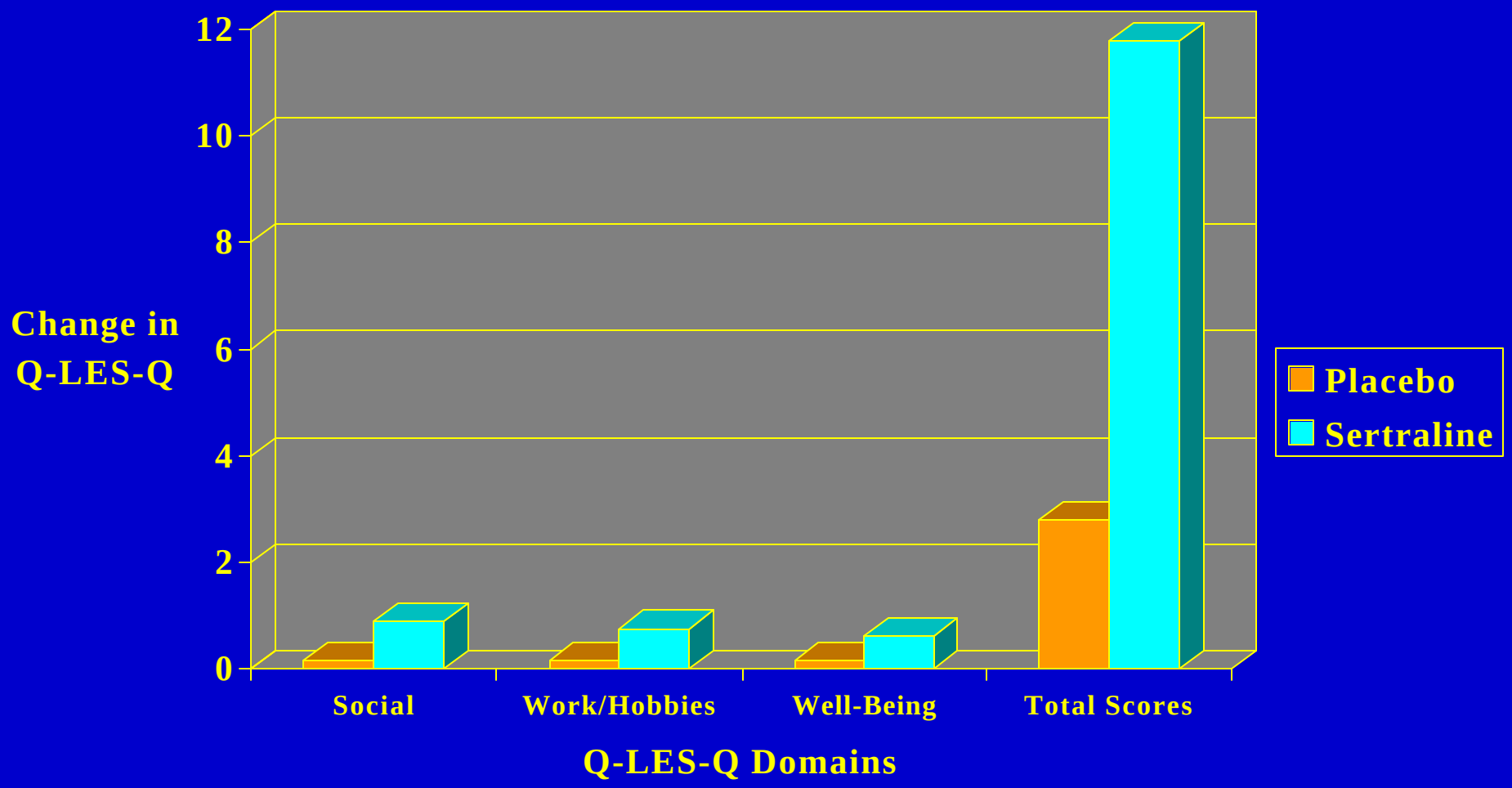
Criteria: CAPS-2 > 30% and CGI=1 or 2 at endpoint

Values Are % of Group n



*p<.05 sertraline vs. placebo

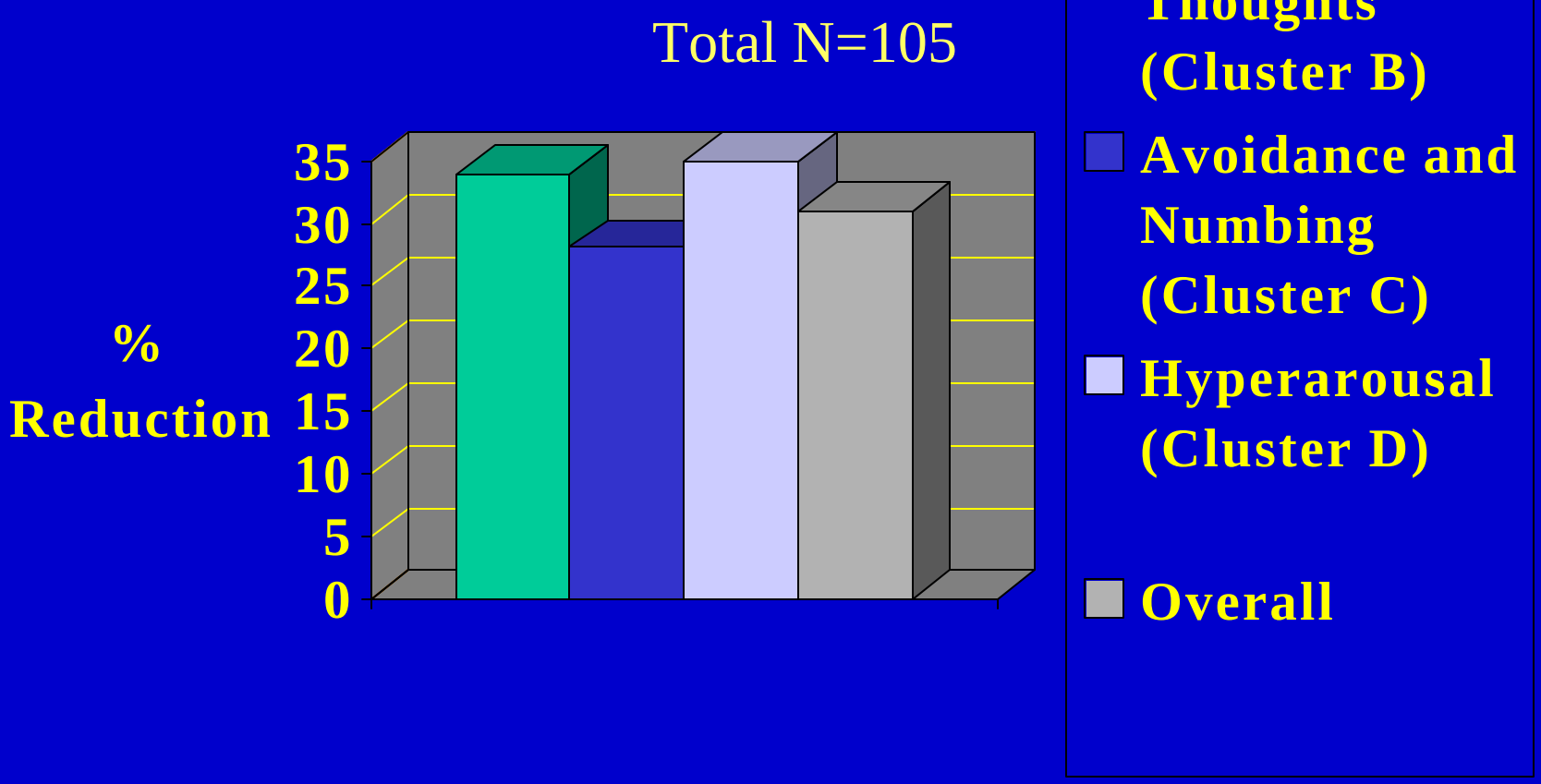
Quality of Life in PTSD: *Sertraline vs. Placebo*



*p<.05 **p<.07

Open-Label Treatment With Nefazodone

Effect on Overall PTSD and Each PTSD Cluster Symptom



Conclusions

- PTSD common, esp. among those w/SUDs
- Complex association of symptoms
- Screening effective
- Effective psychosocial treatments
- Effective medication treatments